



Northern Prairie Wildlife Research Center Biological Resources Discipline - Central Region

Mission: The center conducts research on the biological resources of the nation's interior grasslands and develops research information on the ecological requirements for sustainable wildlife populations.

The Northern Prairie Wildlife Research Center (NPWRC), located in Jamestown, North Dakota, conducts research needed for the management and preservation of migratory grassland-nesting birds, with primary emphasis on waterfowl within the Prairie Pothole Region.

The interior grasslands, or prairies, of the North American continent are an invaluable natural resource. For many species of migratory birds, the prairies are also home to a large resident flora and fauna, including many endemic species. Today, intensive agriculture and other human activities have drastically reduced the extent of the native grassland and greatly modified the remainder. Habitat loss and fragmentation, fire suppression, altered hydrology, intensive grazing, and modified predator communities have placed many plant and animal species at risk. On-going research at NPWRC is divided between (1) studies to assess the numbers and



NPWRC's web site contains a butterfly identification link



A Swift fox is fitted with a radio collar

distributions of plants and animals, including identification of changes resulting from habitat loss and modification; and (2) quantitative ecological research at the species, population, and ecosystem levels to identify the requirements of individual species and the biotic and abiotic interactions within the communities and ecosystems.

The Center's Core Capabilities

The Center maintains staff expertise in the following core areas:

- ◆ Waterfowl ecology, behavior, and population dynamics
- ◆ Biology and ecology of grassland birds
- ♦ Wetland ecology, classification, and management
- ◆ Mammalian predator ecology, behavior, and management

Core Capabilities and Field Stations

- Grassland vegetation analysis, ecology, and management, including grassland and savanna fire ecology
- ◆ Aquatic and grassland invertebrate biology
- ◆ Food web analysis using stable isotope techniques
- ♦ Landscape and plant ecology
- Disturbance ecology
- ◆ Amphibian and reptilian taxonomy, ecology, and physiology
- ◆ Statistical and technological applications, such as GIS and remote sensing
- ◆ Restoration of prairie and savanna habitats
- ◆ Control of invasive exotic plants

NPWRC Field Stations:

University of Missouri Field Station

Columbia, MO Conduct studies to develop and evaluate long-term ecological monitoring strategies for grassland units of the National Park System.

University of Minnesota Field Station- Wolf Project St. Paul, MN 55108 Concentrating on wolf ecology.



Bird in the Tallgrass Prairie National Preserve



Sandhill cranes gather in the prairie mist



Long-horned beetles are used in biological control of leafy spurge



Female mallard with ducklings

University of Minnesota Field Station- Social Science Program St. Paul, MN 55108 Researches visitor management

Researches visitor management issues in the nation's National Parks.

University of Minnesota Field Station- Grassland Initiative St. Paul, MN 55108

Woodworth Field Station

Woodworth, ND Provides dormitory, laboratory and other support facilities for Center and visiting biologists working on field studies.

Information:

Central Region

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USGS Home Page http://www.usgs.gov

Central Region Home Page: http://biology.usgs.gov/cro

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